United States Patent [19]

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[54] **SCREEN MANAGER FOR DATA PROCESSING SYSTEM**

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[58] Field of Search ... 364/200 MS File, 900 MS File, 364/300; 340/709, 712, 734, 735, 747

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[57] **ABSTRACT**

In a multi-tasking data processing system, each task may request that the operating system set up descriptor blocks which identify virtual screens for display of data on the video display. Under keyboard control, only one virtual screen is selected for display at a given time. The operating system reserves a portion of the video display for displaying identifiers of the virtual screens which have been established but which are held in background. Each virtual screen may be subdivided into viewports by the corresponding application task. Those viewports are also identified in the operating system by descriptor blocks which point to pages of data in the document files. The descriptor blocks can be modified through requests from application tasks even when held in background. Whenever the display memory is updated, data designated by the descriptor blocks is passed through a rasterizer in the operating system which generates the pixel data to be stored in a display memory.

43 Claims, 11 Drawing Figures